BACTERIAL PHYSIOLOGY UNIT HARVARD MEDICAL SCHOOL

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Nov. 1, 1985.

Dear Josh,

rges, (1889)

I recall from van Niel's course that Beijerinck introduced the term auxanography for testing the nutritional activity of materials on plates heavily seeded with a bacterial strain; but I cannot document it. When I got into nutritional studies on mutants people working on antibiotics were using paper chromatography, followed by incubation on seeded plates, to compare antibacterial compounds, but I don't recall whether I adapted this technique to my purposes or whether others had already used such auxanograms. I've just looked up my 1950 Experientia paper, which summed up all my early work, and I find an illustration of syntrophism between adjacent streaks, but no mention of auxanograms. Sorry my memory isn't better.

Your may have a sentimental interest in the enclosed. The department put on a grand party to celebrate my retirement, and though Gloria interrupted the first day's activities we were fortunately able to reschedule for the next day and did not lose too many participants. It was very heartwarming to see almost all my former students and associates again and watch them present a lively symposium on a variety of topics. I was tempted to invite you as a moderator but decided to stick with the defined group.

I have handed my lab and research program over to a long-time associate, P. C. Tai, and as emeritus I am continuing to have an office in the dept. and to teach, and I enjoy having more time for writing. In a curious twist, a week before my party, while preparing to give a talk on antibiotic actions on the ribosome at a SGM symp. in England, I got a brainstorm that explains all the features of the lethal action of aminoglycosides. It turns out that all the theories are right, in the sense of sharing in the action: membrane damage, misreading (which autocatalytically increases the membrane damage by inserting garbled protein), blockade of initiating ribosomes, and irreversible uptake are all essential. Thus ends a pursuit of more than 25 years.

Warm regards,

Bernard D. Davis